Bachelor of Engineering (Honours) (Mining) with Bachelor of Mathematical and Computer Sciences - Mathematics Major – All Majors – Semester 1 Start

THE UNIVERSITY of ADELAIDE

Faculty of Engineering, Computer and Mathematical Sciences
2021 Study Plan

Bachelor of Engineering (Honours) (Mining)
with Bachelor of Mathematical and Computer Sciences - Mathematics Major

Year 1				
S 1	MATHS 1011 Mathematics IA ☐	ENG 1003 Programming (Matlab and Excel) ☐	CEME 1004 Engineering Mechanics-Statics ☐	General Elective ☐
S 2	MATHS 1012 Mathematics IB ☐	^ENG 1001 Introduction to Engineering ☐	MINING 1011 Introduction to Mining Engineering ☐	Level 1 Engineering Elective (see elective table) ☐
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II ☐	CEME 2001 Strength of Materials ☐	MECH ENG 2021 Thermo-Fluids I ☐	Level II or III Mathematics Elective ☐
S 2	MATHS 2107 Statistics & Numerical Methods II ☐	GEOLOGY 2504 Economic & Mine Geology II ☐	General Elective ☐	Level II or III Mathematics Elective ☐
Year 3				
S 1	ENG 3004 Systems Engineering and Industry Practice ☐	MINING 3070 Resource Estimation ☐	MINING 3071 Mining Systems ☐	MINING 3072 Mining Geomechanics ☐
S 2	ENG 3005 Research Method & Project Management ☐	MINING 3068 Mining Ventilation ☐	MINING 3069 Rock Breakage ☐	MINING 3073 Mine Planning ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below.				
Year 4				
S 1	ENG 4001A Research Project Part A ☐	MINING 4102 Mine Geotechnical Engineering ☐	MINING 4104 Socio-Environmental Aspects of Mining ☐	MINING 4106 Hard Rock Mine Design & Feasibility ☐
S 2	ENG 4001B Research Project Part B ☐	MINING 4101 Mine Management ☐	MINING 4111 Coal Mine Design & Feasibility ☐	Level II or III Mathematics Elective ☐
Year 5				
S 1	Mining Engineering Elective (see elective table) ☐	Level II or III Mathematics Elective ☐	Level III Mathematics Elective ☐	Level III Mathematics Elective ☐
S 2	Mining Engineering Elective (see elective table) ☐	Mining Engineering Elective (see elective table) ☐	Level III Mathematics Elective ☐	Level III Mathematics Elective ☐

Core Courses	Elective (see elective table)	Double Degree Courses

Electives Table

CHOOSE FROM THE FOLLOWING LEVEL 1 ELECTIVES					
S1	ELEC ENG 1101	Electronic Systems	**S2**	CEME 1002 MECH ENG 1007	Introduction to Infrastructure Engineering Mechanics- Dynamics
CHOOSE FROM THE FOLLOWING MINING ENGINEERING ELECTIVES					
TBC	ENG 4011 MINING 4107 MINING 4110 MINING 4112 MINING 4113 MINING 4114	Engineering Geology Surface Mining Systems Mine Asset Management & Services Advanced Mine Geotechnical Engineering Advanced Mine Ventilation Simulation & Animation for Mining Engineers			

NOTES

^ EAL: Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering

Internship: All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Internships are self-sourced and resources are available through Careers Service. Register with CareerHub to access a database where opportunities are posted.

General electives:
How to choose an elective course in your area of interest?
Please refer to the steps via the link: https://ecms.adelaide.edu.au/study-with-us/student-support/enrolment

Program Rules: For academic program rules please refer to the following website:
https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support

THE UNIVERSITY of ADELAIDE

Faculty of Engineering, Computer and Mathematical Sciences 2021 Study Plan

Bachelor of Engineering (Honours) (Mining) - Mine Automation Major with Bachelor of Mathematical and Computer Sciences - Mathematics Major

Year 1				
S 1	MATHS 1011 Mathematics IA ☐	ENG 1003 Programming (Matlab and Excel) ☐	CEME 1004 Engineering Mechanics-Statics ☐	ELEC ENG 1101 Electronic Systems ☐
S 2	MATHS 1012 Mathematics IB ☐	^ENG 1001 Introduction to Engineering ☐	MINING 1011 Introduction to Mining Engineering ☐	MECH ENG 1007 Engineering Mechanics - Dynamics ☐
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II ☐	CEME 2001 Strength of Materials ☐	MECH ENG 2021 Thermo-Fluids I ☐	Level II or III Mathematics Elective ☐
S 2	MATHS 2107 Statistics & Numerical Methods II ☐	GEOLOGY 2504 Economic & Mine Geology II ☐	MECH ENG 2101 Mechatronics IM ☐	Level II or III Mathematics Elective ☐
Year 3				
S 1	ENG 3004 Systems Engineering and Industry Practice ☐	MINING 3070 Resource Estimation ☐	MINING 3071 Mining Systems ☐	MINING 3072 Mining Geomechanics ☐
S 2	ENG 3005 Research Method & Project Management ☐	MINING 3068 Mining Ventilation ☐	MINING 3069 Rock Breakage ☐	MINING 3073 Mine Planning ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see note below.				
Year 4				
S 1	ENG 4001A Research Project Part A ☐	MINING 4102 Mine Geotechnical Engineering ☐	MINING 4104 Socio-Environmental Aspects of Mining ☐	MINING 4106 Hard Rock Design & Feasibility ☐
S 2	ENG 4001B Research Project Part B ☐	MINING 4101 Mine Management ☐	MINING 4111 Coal Mine Design & Feasibility ☐	ELEC ENG 2104 Digital Signal Processing ☐
Year 5				
S 1	MECH ENG 3106 Mechatronics II ☐	Level II or III Mathematics Elective ☐	Level II or III Mathematics Elective ☐	Level III Mathematics Elective ☐
S 2	MINING 4115 Automation in Mining ☐	Level III Mathematics Elective ☐	Level III Mathematics Elective ☐	Level III Mathematics Elective ☐

Core Courses	Double Degree Courses	Major Courses

NOTES

^ EAL: Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering

Internship: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Internships are self-sourced and resources are available through Careers Service. Register with CareerHub to access a database where opportunities are posted.

Mathematics Electives may be chosen from those listed in the program rules for the Bachelor of Mathematical and Computer Sciences. Students must complete a major or double major in accordance with the Bachelor of Mathematical and Computer Science program rules

Program Rules: For academic program rules please refer to the following website:
https://calendar.adelaide.edu.au/faculty/ecms

Information and Enrolment Advice:
Ask ECMS
Email: askecms@adelaide.edu.au
Website: https://ecms.adelaide.edu.au/study-with-us/student-support